



Mr. Scott Green, RG Manager, Remedial Projects Manager ARIZONA DEPARTMENT OF ENVIRONMENTAL OUALITY 1110 West Washington Street Phoenix, Arizona 85007

Re: Roosevelt Irrigation District's (RID) Response to Comments on RID's Feasibility Study Report by the Working Group, the Arizona Chamber of Commerce and Industry (AZ Chamber), City of Phoenix (COP) and the Salt River Project (SRP)

Dear Mr. Green:

Synergy Environmental LLC, on behalf of the Roosevelt Irrigation District (RID) and in conjunction with RID legal counsel, has reviewed the various January 14, 2015 comments regarding the RID Feasibility Study Report (RID FS Report) and the Working Group FS Report (WGFS Report), including the response submitted by Karen Gaylord on behalf of the West Van Buren Working Group (WG Response), the Arizona Chamber of Commerce comments (AZ Chamber Comments), the Squire Patton Boggs comments on behalf of City of Phoenix (COP Comments) and the Salt River Project comments (SRP Comments).

At the outset, RID strongly objects, as violative of multiple Arizona laws and WQARF rules as more fully described below and in its January 7, 2015 Response, to the fundamental proposition incorporated within all the above-referenced comments that the commenters are able to indiscriminately and without authority pollute Arizona's drinking water protected use aguifers and water supply wells and have no liability for violating the applicable state water quality standards and no remedial obligation to control, manage or cleanup their contamination, unless and until only certain beneficial uses are made of the contaminated resource. "New WQARF" did not grant an unfettered license to pollute Arizona's aquifers and water supply wells without legal or regulatory consequence if no or only certain beneficial uses were currently being made of the polluted resource. This shameful and unlawful position shared by all of the commenters is epitomized by the false statement in the AZ Chamber Comments that the WGFS Report "conclusively demonstrates ... that treatment is NOT now needed and can be avoided entirely."1

The RID FS Report was submitted for the Arizona Department of Environmental Quality's (ADEQ's) approval in order to expeditiously cleanup<sup>2</sup> and address the groundwater

<sup>&</sup>lt;sup>1</sup> AZ Chamber Comments, page 2.

<sup>&</sup>lt;sup>2</sup> See ADEQ Strategic Plan: FY15 Update to FY2014-FY2018 Plan where a primary goal of ADEQ is to "accelerate clean-ups."



contamination<sup>3</sup> that threatens public health, welfare and the environment and adversely impacts RID water supply wells in the West Van Buren Area (WVBA) Water Quality Assurance Revolving Fund (WQARF) Site.

Contrary to the misinformation contained in the WG Response, AZ Chamber Comments, COP Comments and SRP Comments, RID has submitted an FS Report to ADEQ that is not only consistent with existing Arizona law and WOARF program rules and policies, but recommends remedial actions that are extremely reasonable, cost-effective and consistent with remedial actions approved by ADEQ and the United States Environmental Protection Agency (EPA) at other similarly contaminated groundwater sites in Arizona. However, RID understands the obvious bias of the Working Group, COP, SRP and the AZ Chamber members who requested the AZ Chamber Comments and why there is so much misinformation contained in the WG Response, AZ Chamber Comments, COP Comments and SRP Comments submitted to ADEQ regarding the RID FS Report. It is an undisputed fact that the members of the Working Group, COP, SRP and certain members of the AZ Chamber have documented "releases" of hazardous substances at their facilities<sup>4</sup> that have contaminated groundwater<sup>5</sup> that is being addressed by RID's ADEQ-approved Modified Early Response Action (ERA) and/or will be addressed by the final remedy selected by ADEO for the WVBA WOARF Site. Under federal law, these documented "releases" classify the owners and operators of these facilities as "potentially responsible parties" (PRPs) who are subject to joint and several liability for the response costs incurred by RID and ADEQ to protect public health, welfare and the environment.<sup>6</sup> In fact, the Working Group has admitted that "the entities listed [by ADEQ] in the West Van Buren Remedial Investigation Report ... and entities that have been historically involved in the Motorola 52<sup>nd</sup> Street superfund,"<sup>7</sup> which include the Working Group members, COP, SRP and certain AZ Chamber members, are PRPs for the groundwater contamination in the WVBA WQARF Site. Not surprisingly, the blatant disregard and misrepresentations of the RID FS Report, applicable state laws and WQARF rules, and ADEQ's remedial objectives for the WVBA WQARF Site are simply shameful efforts to avoid and minimize their legal obligations to

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<sup>&</sup>lt;sup>3</sup> See January 2015 Letters from Goodyear and Buckeye to ADEQ regarding support for the "expeditious" cleanup of the groundwater contamination within the West Van Buren Area WQARF Site.

<sup>&</sup>lt;sup>4</sup> The Working Group acknowledges that it "is an unincorporated association of parties that either had or have operating facilities within the [WVBA]." Working Group FS Report, page 1 (November 2014). Members of the Working Group include: Air Liquide America Specialty Gases, LP; Arizona Public Service (APS); the COP; Dolphin, Incorporated; Freescale Semiconductor, Inc.; Holsum Bakery, Inc.; Honeywell International Inc.; ITT Corporation; Laundry & Cleaners Supply, Inc.; Maricopa Land and Cattle Co.; Milum Textile Services Co.; Prudential Overall Supply, Inc.; Salt River Project Agricultural Improvement and Power District (SRP); Schuff Steel Company; and Univar USA. – formerly Van Waters & Rogers. Penn Racket Sports (HTM Sport GmbH/HEAD USA/HEAD Penn Racquet Sports) participated in the early stages of the Working Group.

<sup>&</sup>lt;sup>5</sup> The COP has acknowledged that the WVBA and Motorola 52<sup>nd</sup> Street co-mingled plume "is the result of historical spills and other releases of commercial and industrial solvents from facilities throughout the area, which reached the groundwater and caused contamination." COP, 2011 Water Resource Plan, page 22 (2011).

<sup>&</sup>lt;sup>6</sup> 42 U.S.C. § 9607(a); *Carson Harbor Vill.*, *Ltd. v. Unocal Corp.*, 270 F.3d 863, 870-71 (9th Cir. 2001) (en banc) <sup>7</sup> *See* Appendix F, WGFS Report (July 15, 2014).



address and remediate the contamination impacting the WVBA aquifer and RID's water supply wells.

Although RID previously has addressed many of the same issues raised in the WG Response, AZ Chamber Comments, COP Comments and SRP Comments in RID's previous response to the Working Group, dated January 7, 2015, and in prior RID correspondence and communications during the more than five years of significant community involvement activities<sup>8</sup> that occurred prior to ADEQ's approval of RID's ERA and Modified ERA pursuant to AAC R18-16-413 and during development of the RID FS Report, RID is compelled to provide this response in order, once again, to correct the administrative record, to advocate for the protection of public health and the environment as required by Arizona law, and to avoid civil and criminal violations of applicable water quality standards as proposed by the WGFS Report and in the comments of its supporters. RID also is compelled once again to highlight the applicable Arizona laws and WQARF rules and policies which have been completely disregarded by the Working Group, AZ Chamber, COP and SRP. Instead of responding to every misrepresentation or inaccuracy in the WG Response, AZ Chamber Comments, COP Comments and SRP Comments, RID is addressing the substantive issues that are relevant to RID's written request for approval, pursuant to AAC R18-16-413, for the RID FS Report.9

The Arizona Aquifer Water Quality Standards are applicable to waters within an aquifer and are independently enforceable from the water quality standards applicable to achieve the current and reasonably foreseeable end uses of waters extracted from the aquifer

Contrary to the WG Response, Arizona law still mandates that "[a]ll aquifers in this state ... shall be classified for drinking water protected use unless the classification is changed in

<sup>&</sup>lt;sup>8</sup> See <a href="http://www.azdeq.gov/environ/waste/sps/wvb.html">http://www.azdeq.gov/environ/waste/sps/wvb.html</a> (ADEQ website containing RID's prior work plans, ADEQ's approvals of such work plans and RID's responses to all PRP comments throughout the last five years addressing many of the same issues raised in the WG Response, AZ Chamber Comments, COP Comments and SRP Comments, but which never persuaded ADEQ to not approve the RID voluntary requests that comply with all applicable WQARF statutory and regulatory criteria).

<sup>&</sup>lt;sup>9</sup> Yet again, SRP continues to raise issues about RID's water rights which have no relevance to what is the best remedial action to meet all applicable laws and WQARF remedial action criteria and to achieve all ADEQ-established remedial objectives for the WVBA WQARF Site. In fact, SRP acknowledged that "RID's irrigation pumping has created a 'hydraulic trough,' which is containing the groundwater plume." SRP Comments, page 5. SRP continues to raise this irrelevant issue, despite the August 2013 letter from the Arizona Department of Water Resources which was temporarily on ADEQ's website before the Working Group requested the letter be removed, and which has been fully discussed in prior RID comments, including RID's January 7, 2015 Response. Similar to the Working Group, SRP fails to provide all of the relevant information surrounding its claim, such as SRP's certification to ADWR and state court that RID has an independent water right, separate from SRP or the Salt River Valley Water Users Association based on applicable state water law and the relevant contracts between SRP and RID.



the manner provided in [ARS § 49-224.C]." <sup>10</sup> Arizona law mandated and ADEQ has adopted "water quality standards ... for all waters in all aquifers to preserve and protect the quality of those waters for all present and reasonably foreseeable future uses." <sup>11</sup> These applicable and enforceable aquifer water quality standards (AWQS) must be achieved by ADEQ before a WQARF Site can be delisted. In fact, the South Mesa FS Report, referenced by the SRP Comments, clearly states that "[t]hough not currently utilized as a drinking water supply, the UAU at the SMWRS is designated as a potential drinking water supply. Therefore, ADEQ cannot delist the SMWRS until PCE groundwater concentrations in the groundwater are below the AWQS of 5.0  $\mu$ g/L .... The objective [of ADEQ and the WQARF Program] is to delist the SMWRS; however, leaving PCE in the groundwater above the AWQS of 5.0  $\mu$ g/L requires that the aquifer be designated a non-drinking water aquifer." <sup>12</sup>

Similarly, the WVBA WQARF Site cannot be delisted until the groundwater in the aquifer meets the applicable aquifer water quality standards for its drinking water protected use or ADEQ changes the classification of the WVBA aquifer to a non-drinking water aquifer. According to ADEQ's WVBA Regional Groundwater Monitoring Annual 2013-2014 Report, TCE, a known human carcinogen, is present in the WVBA aquifer in concentrations up to 50x the applicable *numeric* aquifer water quality standard. Any effort to change the classification of the WVBA aquifer to a non-drinking water aquifer would not only be contrary to positions taken by ADEQ, RID, COP and SRP that recognize the "reasonably foreseeable use" of the WVBA aquifer as a drinking water supply, but it would also be contrary to the needs of West Valley cities that have noted an interest "in the utilization of the treated water from the RID remediation effort as a much-needed resource for ... future development." Even ADEQ has recently acknowledged that "protecting and restoring the water resources right here in Arizona is critical for meeting future demand ... driven by future economic growth."

In addition to achieving the independent and enforceable applicable aquifer water quality standards, "the selected remedial action shall address, at a minimum, any well that at the time of selection of the remedial action ... would now or in the reasonably foreseeable future produce water that would not be fit for its current or reasonably foreseeable end uses without treatment due to the release of hazardous substances." This dual purpose of a WQARF remedy was noted in the recent South Mesa FS Report in that the "[r]emedy development for the site is based on [achieving groundwater AWQS] **AND** protecting **BOTH** municipal and SRP groundwater use." The protected end uses in a WQARF remedy are established by ADEQ as the "remedial"

<sup>&</sup>lt;sup>10</sup> ARS § 49-224.B.

<sup>&</sup>lt;sup>11</sup> ARS § 49-221.A.; AAC R18-11-405; AAC R18-11-406.

<sup>&</sup>lt;sup>12</sup> South Mesa WQARF Site Final FS Report, 25 (April 2014).

<sup>&</sup>lt;sup>13</sup> Regardless if the recent reports identify a declining trend, Arizona's applicable numeric and narrative aquifer water quality standards are enforceable and are still required to be achieved.

<sup>&</sup>lt;sup>14</sup> Letter from Town (now City) of Buckeye to Benjamin Grumbles (September 23, 2010).

<sup>&</sup>lt;sup>15</sup> ADEQ, WQARF 2014 Annual Report, 4 (2014).

<sup>&</sup>lt;sup>16</sup> ARS § 49-282.06.B.4.b.

<sup>&</sup>lt;sup>17</sup> South Mesa WQARF Site Final FS Report, page 25 (April 2014) (emphasis added). The current



objectives" for the WQARF site. The inability of "achieving all of the remedial objectives" established for a WQARF Site prevents a proposed remedial alternative from being approved by ADEQ.<sup>18</sup>

Similar to the South Mesa WQARF Site, the current and reasonably foreseeable water end uses that are to be protected and preserved at the WVBA WQARF Site also include municipal and irrigation end use. However, unlike the RID water supply wells located in the WVBA WQARF Site, the target-VOC at the South Mesa WQARF Site had "not been detected above [municipal or irrigation use water quality standards] in groundwater samples collected from [the contaminated] UAU wells since June 2004." In the WVBA WQARF Site, there are 13 RID water supply wells that have target-VOC concentrations that exceed the applicable EPA drinking water MCL standard for a municipal use. Treatment of the target-VOCs in RID's 13 impacted water supply wells to the applicable EPA drinking water MCL standards for municipal use must be included in the selected remedy, at a minimum, to comply with AAC R18-16-407.E.1 and ARS § 49-282.06.B.4.b.

Nevertheless, even if RID's current and reasonably foreseeable water end uses were not impacted, like the wells in the South Mesa WQARF Site, the "primary question for [any WQARF] remedy is how long will be required for the AWQS ... for [the target VOCs] to be achieved under different pumping scenarios." Only RID's FS Report developed proposed remedial alternatives that achieve BOTH the applicable and enforceable aquifer water quality standards for the WVBA aquifer and the equally applicable and enforceable water end use standards to "protect, restore, replace or otherwise provide" the current and reasonably foreseeable water uses of the waters extracted from the WVBA aquifer, as established by ADEQ's "remedial objectives" and required by ARS § 49-282.06.B.4.b. In contrast, none of the Working Group's proposed remedial alternatives in the WGFS Report achieve either mandatory WQARF requirement.

RID is prohibited from maximizing the legally-protected reasonably foreseeable beneficial uses of the water from 13 RID water supply wells in the WVBA WQARF Site because of the contamination

The WG Response is correct that "the remedy proposed by RID makes the new drinking water use possible." This is true because the WVBA aquifer and 13 of RID's water supply wells in the WVBA WQARF Site are impacted above the applicable drinking water aquifer water quality standard for the drinking water protected use classification of the WVBA aquifer<sup>21</sup> and, therefore, the groundwater pumped by RID from these wells is also above

<sup>&</sup>lt;sup>18</sup> AAC R18-16-407.E.1.

<sup>&</sup>lt;sup>19</sup> South Mesa WQARF Site Final FS Report, page 25.

<sup>&</sup>lt;sup>20</sup> WG Response, page 11.

<sup>&</sup>lt;sup>21</sup> See ARS § 49-224.B and § 49-223.A and E; AAC R18-16-405 and 406.



the applicable water quality standards for its reasonably foreseeable end use as a municipal water supply.  $^{22}$ 

State law mandates that "all aquifers in this state ... shall be classified for drinking water protected use."<sup>23</sup> Arizona law also mandates that ADEQ "shall adopt, by rule, water quality standards ... for all aquifers to preserve and protect the quality of those waters for all present and reasonably foreseeable future uses."<sup>24</sup> Pursuant to ARS §§ 49-221 and 49-223.A., ADEQ promulgated "aquifer water quality standards [that] ... apply to aquifers [including the WVBA aquifer] that are classified for drinking water protected use."<sup>25</sup>

State law additionally and independently mandates that "the selected remedial action shall address, at a minimum, any well at the time of selection ... if the well would now or in the reasonably foreseeable future produce water that would not be fit for its current or reasonably foreseeable end uses without treatment due to the release of hazardous substances." <sup>26</sup>

But for the VOC contamination released or threatened to be released at facilities owned or operated by PRPs, including the Working Group members, COP, SRP and certain AZ Chamber members, the WVBA aguifer and RID's water supply wells would not be contaminated and impaired from being utilized as a direct drinking water source, which is the statutorily protected use classification of the WVBA aguifer,<sup>27</sup> or as a municipal water supply, which is the "reasonably foreseeable future use" of the WVBA aguifer and RID's water supply wells based on ADEO's Land and Water Use Survey of the WVBA WOARF Site and as determined in the "remedial objectives" established by ADEQ for the WVBA WQARF Site.<sup>28</sup> Accordingly, the final remedy must require remedial actions to both achieve compliance with the applicable aguifer water quality standards for the WVBA aguifer and to provide for municipal use of RID's water supply wells. All of RID's proposed remedial alternatives in the RID FS Report meet these minimum statutory requirements; however, not a single proposed remedial alternative in the WGFS Report meets these minimum statutory requirements. Yet again, the Working Group and its supporters would have ADEQ refuse to follow the plain meaning of the applicable Arizona statutes and WQARF rules.

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<sup>&</sup>lt;sup>22</sup> See ARS § 49-282.06.A.2; ARS § 49-282.06.B.4.b and ARS § 49-221.A.

<sup>&</sup>lt;sup>23</sup> ARS § 49-224.B.

<sup>&</sup>lt;sup>24</sup> ARS § 49-221.A.

<sup>&</sup>lt;sup>25</sup> AAC R18-11-406.A.

<sup>&</sup>lt;sup>26</sup> ARS § 49-282.06.B.4.b.

<sup>&</sup>lt;sup>27</sup> See ARS §§ 49-224.B., 49-223.A., and E. and 49-221.A; AAC R18-11-406 and AAC R18-16-405.

<sup>&</sup>lt;sup>28</sup> AAC R18-16-407.E.1. But for the contamination from the PRP facilities, RID would not have to incur any response costs. Any response costs to address the contamination is recoverable under WQARF, contrary to the WG Response, and in fact the preamble states that the "well owner, or water provider would not be required to reimburse the WQARF fund if coincidental benefits ... occurred as a result of the remedial action." 8 AAR 1499. It is no longer surprising that the Working Group fails to include such information that clearly contradicts its stated position.



In short, not only does state law mandate that the WVBA aquifer be restored to its applicable drinking water aquifer water quality standard to "preserve and protect the quality of those [aquifer] waters for all present and reasonably foreseeable future uses"<sup>29</sup> by extracting the target-VOCs through groundwater pumping, but that, at a minimum, RID's 13 water supply wells impacted above the applicable municipal drinking water quality standards be treated to provide for their "reasonably foreseeable end use" and "maximum beneficial use" as a municipal water supply.<sup>30</sup>

The WG Response correctly states that ADEQ is obligated to consider "the extent to which the amount of water available for beneficial use will be preserved by a particular type of remedial action"<sup>31</sup> and that "the Legislature made a deliberate choice to ... require pumping and treatment only when necessary to protect or provide for uses that require such a remedy."<sup>32</sup> The current necessity to preserve and protect the contaminated WVBA aquifer as a future drinking water supply is established by Arizona statute and the applicable aquifer water quality standards and was confirmed by COP and SRP. In its 2011 Water Resource Plan, the COP indicated that it has encouraged ADEQ to "expedite remediation actions as the supply is expected to be an important component in meeting future service area demand during surface water shortfalls."<sup>33</sup> SRP indicated in its Land and Water Use Study Questionnaire submitted on September 21, 2007 that, "their current use of groundwater from the SRP water supply wells is for irrigation but the future use may be drinking water supply for residential and commercial development."<sup>34</sup>

In addition to COP and SRP, other municipalities have stated their intent to utilize the WVBA treated water. The Town (now City) of Buckeye clearly identified the need for the WVBA aquifer to be remediated since "there is no issue more important to the quality of life and economic viability in West Valley communities than dependable sources of usable water." For this reason, the City of Buckeye had previously expressed to ADEQ that the City "is very interested in the utilization of the treated water from the RID remediation effort as a much-needed resource for our future development." Likewise, the City of Goodyear also has informed ADEQ "of the City of Goodyear's interest in participating in the future utilization of the remediated water supply." Given the potential water shortages

<sup>&</sup>lt;sup>29</sup> See ARS §§ 49-224.B., 49-223.A. and E. and ARS § 49-221.A; AAC R18-16-406; AAC R18-16-405.

 $<sup>^{30}</sup>$  ARS §§ 49-282.06.B.4.b and 49-282.06.A.2.; AAC R18-16-406.D and I.; AAC R18-16-407.E.1.

<sup>&</sup>lt;sup>31</sup> ARS § 49-282.06.C.5; WG Response, page 13.

<sup>&</sup>lt;sup>32</sup> WG Response, page 13.

<sup>&</sup>lt;sup>33</sup> See page 67.

Remedial Objectives Report, West Van Buren Area WQARF Registry Site, Phoenix, Arizona, dated August 8, 2012, page 3-2.

Letter from Town (now City) of Buckeye to Benjamin Grumbles (September 23, 2010).

<sup>&</sup>lt;sup>36</sup> Ibid.

<sup>&</sup>lt;sup>37</sup> Letter from City of Goodyear to Benjamin Grumbles (September 24, 2010). It appears that many of the false claims included in the Working Group's prior submittals have been shared with the City of Goodyear in an effort to argue, contrary to law, that contracts with a municipal user are a requirement before ADEQ can approve treatment



predicted for Arizona in the near future, even ADEQ has recently noted "the need to protect and remediate ... groundwater supplies becomes increasingly critical to the water supply future of Arizona" and essential for economic development.<sup>38</sup>

# Only RID's proposed remedial alternatives achieve Arizona's Applicable Aquifer Water Quality Standards and ALL Remedial Objectives established by ADEQ for the WVBA WQARF

Strangely, even though the Working Group correctly states that "WQARF requires ADEQ to identify current and reasonably foreseeable uses of water and then design remedial objectives to protect and provide for those uses," only RID's proposed remedial alternatives "ensur[e] that uses impaired by the contamination are protected" as required by state law and the WQARF program.

In order to achieve the drinking water protected use classification of the WVBA aquifer, the selected remedy must achieve EPA's primary MCLs as the applicable aquifer water quality standards because a municipal drinking water use has been determined a "reasonably foreseeable future use" of the WVBA aquifer that must be preserved and protected as required by Arizona law.<sup>40</sup> Extraction of the target VOC contaminants from the WVBA aquifer is necessary to protect, preserve and restore the contaminated WVBA aquifer to its drinking water protected use classification and to comply with EPA's primary MCLs as the applicable WVBA aquifer water quality standards.<sup>41</sup> Therefore, the Working Group's reference and reliance on preamble language that the "Legislature recognized that remediation under WQARF would not necessarily result in achievement of AWQS at every site," is misplaced and not applicable to the WVBA WQARF Site. As explained in RID's January 7, 2015 Response,

of contaminated groundwater to drinking water standards. SRP Comments, page 5. As previously documented, no such municipal user prerequisite applies as ADEQ has required treatment of contaminated groundwater to drinking water standards that is subsequently discharged for irrigation use.

<sup>&</sup>lt;sup>38</sup> ADEQ, WQARF FY2014 Annual Report, page 4 (2014). ADEQ's own position contradicts an unsubstantiated statement by the Working Group that "drinking water uses proposed by RID would not occur <u>but for</u> RID's plan to seek legislation to allow it to market the water as WQARF remediated water." WG Response, page 11. Emphasis added. The truth, however, is that <u>but for</u> the contamination from the Working Group facilities and other facilities, the WVBA aquifer would meet its applicable primary MCL aquifer water quality standards, satisfy its "classification for drinking water protected use," and "preserve and protect the quality of these [aquifer] waters for all present and reasonably foreseeable future uses," including as a future drinking water supply. ARS §§ 49-223.A and E, 49-224.B, and 49-221.A.

<sup>&</sup>lt;sup>39</sup> WG Response, page 12.

<sup>&</sup>lt;sup>40</sup> See ARS §§ 49-224.B, 49-223.A and E, 49-221.A, AAC R18-16-406 and 405.

<sup>&</sup>lt;sup>41</sup> It is a civil offense to violate the applicable aquifer water quality standards punishable by a fine not to exceed \$25,000 per day per violation, and it is a criminal violation to knowingly violate the applicable aquifer water quality standards. *See* ARS §§ 49-262.C. and 49-263.C. ADEQ has determined that the reasonably foreseeable future use of the WVBA aquifer is a municipal end use as a drinking water supply. Arizona law has established applicable numeric and narrative aquifer water quality standards. As discussed more fully in RID's January 7, 2015 Response, the WGFS Report acknowledges that its proposed remedial alternatives will not achieve those applicable water quality standards when the active remedial actions are intended to cease operation in 2026.



the authority in ARS § 49-282.06.D allowing the possibility of a non-AWQS remedy is limited to "after the completion of the remedy" and then only if the Director finds that the remedial action meets all the other requirements of ARS § 49-282.06 (which the WGFS Report fails to do as described in RID's comments to same). A remedy has not been approved, implemented or completed at the WVBA WQARF Site. The drinking water protected use classification and EPA's primary MCLs as the applicable aquifer water quality standards can be achieved at the WVBA WQARF Site with existing technology as proven by remedial actions at the WVBA WQARF Site and at other similar groundwater cleanup sites in Arizona. Consequently, there is no legal or technical basis or authority allowing a non-AWQS remedial action in the WVBA WQARF Site.

In addition, in order to achieve the separate and independent "remedial objectives" established by ADEQ for the WVBA WQARF Site as required by the WQARF Program, the selected remedy also must achieve through treatment the applicable EPA primary MCLs as the applicable drinking water quality standards because a municipal drinking water use has been determined a reasonably foreseeable end use of the RID water supply wells that must be provided as required by Arizona law.<sup>42</sup> However, it is apparent that the Working Group and its supporters would have ADEQ and the general public falsely believe that the municipal use remedial objectives established by ADEQ for the WVBA WQARF Site do not apply despite the WQARF rules clearly stating that the "reference remedy and alternative remedies shall be capable of achieving all of the remedial objectives."<sup>43</sup> As noted before, it would not be the first time that the Working Group asked ADEQ to disregard the plain language of the applicable WQARF laws.

ADEQ has specifically determined<sup>44</sup> that the "ROs for current and reasonably foreseeable future municipal use in and near the WVBA [include] [t]o protect, restore, replace or otherwise provide a water supply for municipal use by currently and reasonably foreseeable municipal well owners within the WVBA WQARF if the current and reasonably foreseeable future uses are impaired or lost due to contamination from the site."<sup>45</sup> The

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WVBA WOARF Site, page 3-2.

<sup>&</sup>lt;sup>42</sup> ARS § 49-282.06.B.4.b.; ARS § 49-282.06.A.2. Treatment of the target-VOC contaminants extracted from the WVBA aquifer to drinking water MCL standards is necessary to provide and restore a contaminated water supply for drinking water use. ARS § 49-353.A.2.a and AAC R18-4-109. ADEQ has established that the reasonably foreseeable end use of the groundwater pumped within the WVBA WQARF Site, including RID's water supply wells, is a municipal use as a drinking water supply. The MCLs also have been adopted as the numeric aquifer water quality standards (ARS § 49-223.A and AAC R18-11-406) since Arizona law has classified all aquifers in Arizona for drinking water protected use (ARS § 224.B), which is separate from the enforceable narrative aquifer water quality standards (ARS § 49-221.D and R18-11-405). Therefore, any "selected remedy shall, at a minimum, address" RID's wells impacted above the MCLs and AWQSs (ARS § 49-282.06.B.4.b).

AAC R18-16-407.E.1.
 ADEQ considered the comments of interested stakeholders to determine whether municipal drinking water use was a reasonably foreseeable end use for the WVBA aquifer. SRP, COP and RID all confirmed that "the future use may be drinking water supply for residential and commercial development." ADEQ, Final Remedial Objectives for

<sup>&</sup>lt;sup>45</sup> ADEQ has adopted similar ROs to protect current and reasonably foreseeable end uses for municipal well owners with wells outside the WVBA plume.



"current and reasonably foreseeable uses are impaired or lost due to contamination" if the contamination exceeds the applicable water quality standards for a municipal use as a drinking water supply. Pursuant to Arizona law, a water supply for municipal use is required to meet the federal primary drinking water MCLs. He applicability of the EPA MCLs as an enforceable municipal end use water quality standard is reinforced in ARS § 49-223.A, that declares the "[p]rimary drinking water maximum contaminant levels ... are adopted as drinking water aquifer water quality standards." In addition to the numeric drinking water aquifer water quality standards, which were adopted by rule in AAC R18-11-406, Arizona also has adopted narrative aquifer water quality standards that are equally enforceable under AAC R18-11-405. These narrative aquifer water quality standards prohibit a pollutant to "be present in an aquifer classified for a drinking water protected use in a concentration which endangers human health" or "be present in an aquifer [at a concentration] which impairs existing or reasonably foreseeable uses of water in an aquifer."

In order to achieve the established municipal use remedial objectives for the WVBA WQARF Site as well as to comply with the applicable statutory protection provided, at a minimum, to any well that "would now or in the reasonably foreseeable future produce water that would not be fit for its current or reasonably foreseeable end uses without treatment due to the release of hazardous substances," the selected remedial action for the WVBA WQARF Site must "restore" any wells that are impaired or lost due to contamination above the applicable MCLs for municipal use and "protect" all wells from being so impaired or lost. Based on ADEQ's recent monitoring data, the concentrations of contaminants in 13 RID water supply wells exceed the applicable water quality MCL standards for municipal use. Thus, treatment to the drinking water MCL standard at the RID wells impacted above that applicable water quality standard is necessary to achieve the municipal end use remedial objective established for the WVBA WQARF Site and to comply with the minimum protection afforded by statute to well owners. RID's proposed remedial alternatives in the FS Report not only "restore" these impaired wells, but also include measures to "protect" all wells within and peripheral to the WVBA plume

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<sup>&</sup>lt;sup>46</sup> ARS § 49-353.A.2.a; AAC R18-4-109. ADEQ was obligated to develop rules that would allow for state primacy over the Safe Drinking Water Act (SDWA). In order to ensure state primacy, ADEQ simply incorporated the federal safe drinking water rules by reference. 14 AAR 2978, 2981 (August 1, 2008). ADEQ noted that the "general format of the SDWA regulations is that EPA sets maximum contaminant levels ("MCL") on contaminants." Water used for drinking water is to be monitored to ensure compliance with the MCLs and "[i]f an MCL is exceeded, usually the PWS [public work system] must retest ... [and] also may need to take corrective action, which may include capital improvements." Such actions are necessary because ADEQ noted that "[c]lean and safe water for human consumption is undeniably essential for human health [and] [w]ater that is used for drinking and food preparation is required to be free of contaminants." *Ibid*. at 2986. Therefore, "[p]ublic health constitutes the benefit people derive from ADEQ's implementation of the safe drinking water rules." *Ibid*.

<sup>47</sup> AAC R18-11-405.A and C.

<sup>&</sup>lt;sup>48</sup> ARS § 49-282.06.B.4.b.



(including SRP, COP, APS, RID and City of Tolleson [COT] wells) as required by the WVBA WQARF Site remedial objectives.  $^{49}$ 

In contrast, the proposed remedial alternatives in the WGFS Report fail to achieve *all* of the remedial objectives for the WVBA WQARF Site, specifically the municipal use remedial objectives. Rather than applying the plain meaning of the WQARF statutes and rules, the Working Group simply creates a "new" definition of "impaired" to avoid compliance with the law. The Working Group's "new" definition falsely states that "a well is only 'impaired' if it produces water that is not suitable for use without treatment."<sup>50</sup> This "new" definition is used to support the Working Group's false statement that "RID's wells are neither threatened nor impaired [since] [w]ater pumped from those wells is suitable for current irrigation uses without treatment."<sup>51</sup> Therefore, the Working Group falsely concluded that a well is "impaired" based only on its current use.<sup>52</sup>

However, this "new" definition, which the Working Group and its supporters have argued for the past five years to oppose any remediation at the WVBA WQARF Site, is even contrary to the plain language of the legal citations referenced in the WG Response and the remedial objectives established by ADEQ for the WVBA WQARF Site. The minimum statutory requirement in ARS § 49-282.06.B.4.b for any selected remedial action is not limited to the current use of the well. Instead, the law specifically requires that the "selected remedial action, at a minimum, shall address any well at the time of selection ... if the well would now or in the reasonably foreseeable future produce water that would not be fit for its current or reasonably foreseeable end uses without treatment due to the release of hazardous substances." Similarly, even though AAC R18-16-502.A is not applicable to the FS process (only applies to interim remedial actions), that section likewise is not limited only to the current use, but applies if the "well produces water, or in the reasonably foreseeable future will produce water, that is not fit for its current or reasonably foreseeable end-use without treatment due to the release of the hazardous substances." Likewise, the remedial objectives established by ADEQ for the WVBA WQARF Site are not limited to the current use but apply to "a water supply for municipal use by currently and reasonably

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<sup>&</sup>lt;sup>49</sup> The implementation of RID's proposed remedial alternatives would prevent the need for any additional measures to "protect" these wells. In fact, the Working Group clearly notes that additional measures would be needed only if the pumping of RID's wells cease in the future. However, in order to maintain containment and control of the plume, the pumping of RID's wells should not cease given that the Working Group has confirmed that these wells have resulted in "the formation of a regional hydraulic trough or sink within the WVBA, with capture zones ... extending over the WVBA plume footprint." WGFS Report, page 19.

<sup>&</sup>lt;sup>50</sup> WG Response, page 14.

<sup>51</sup> Ihid

<sup>&</sup>lt;sup>52</sup> SRP similarly argues that the selected remedial action should "ensure that groundwater is cleaned up to the quality necessary to meet current uses, while planning for treatment, when needed, for future uses." SRP Comments, page 4. Under this theory, there would be no need for ADEQ to develop remedial objectives to "protect" and "provide" for the reasonably foreseeable end uses as required by AAC R18-16-406.D and I. Therefore, such an interpretation should be rejected as violative of applicable state law because it would require ADEQ to interpret numerous Arizona statutes as meaningless.



foreseeable future municipal well owners within the WVBA WQARF site if the current and reasonably foreseeable future uses are impaired or lost due to contamination from the site."53

In an effort to support this "new" definition, SRP falsely identifies the South Mesa WQARF Site as a site similar to the WVBA WQARF Site. Specifically, SRP states that "[u]nlike RID's justification for its proposed remedy, treatment is not likely today at the affected irrigation wells in South Mesa even though the technology is available to conduct such treatment" and that "requiring immediate aquifer restoration [at the WVBA WQARF Site] is not only inconsistent with WQARF's general approach, but it is also inconsistent with the approach being pursued" at the South Mesa WQARF Site. Yet again, this is a blatant mischaracterization of the facts and the remedial actions being pursued at the South Mesa WQARF Site, which in fact are consistent with the RID FS Report.

Consistent with the WQARF objective for all WQARF-listed sites, including the WVBA WQARF Site, the South Mesa FS Report clearly identifies that "the objective is to delist the [South Mesa WQARF Site]; however, leaving PCE in the groundwater above the AWQS of 5.0 micrograms per liter ( $\mu$ g/L) requires that the aquifer be designated a non-drinking water aquifer." ADEQ's consultant who drafted the South Mesa FS Report makes it quite clear that "ADEQ cannot delist the [South Mesa WQARF Site] until PCE groundwater concentrations in the groundwater are below the AWQS of 5.0  $\mu$ g/L." At the time the South Mesa FS Report was drafted, "the SRP wells are not being used" and "have been inactive for several years," which is not comparable to RID's water supply wells in the WVBA WQARF Site. Because SRP noted that its wells may be operated in the future and possibly even be changed to a drinking water supply use, the South Mesa FS Report incorporated these potential/anticipated changes into the recommended remedy because "operation of these wells may facilitate removing the remaining PCE mass to a level where PCE concentrations are below the AWQS of 5.0  $\mu$ g/L." Importantly, the South Mesa FS Report noted that "based on current conditions and dilution effects of pumping the well, it

<sup>&</sup>lt;sup>53</sup> Governor Ducey's recent comments in the State of the State appear applicable here: "The words of the statute are clear. "And" means "and," "Or" means "or." The Working Group falsely argues that contingency plans can address "new groundwater uses," but such an argument violates the words of the statute. WG Response, page 13. As noted in RID's January 7, 2015 Response, the Working Group has expanded the scope of "contingency measures" beyond their authorized scope. If ADEQ determines (as ADEQ already has determined for the WVBA WQARF Site) that municipal use is either a current or reasonably foreseeable end use of the aquifer or water supply, then EPA's primary drinking water MCLs are the applicable water quality standards and any selected remedy must meet those applicable water quality standards. Such is the situation with the WVBA WQARF Site, which is why only the RID FS Report meets the ADEQ-determined municipal use "remedial objectives' for the WVBA WQARF Site.

<sup>&</sup>lt;sup>54</sup> SRP Comments, page 4.

<sup>&</sup>lt;sup>55</sup> South Mesa FS Report, page 25.

<sup>&</sup>lt;sup>56</sup> *Ibid*.

<sup>&</sup>lt;sup>57</sup> *Ibid*. at page 19.

<sup>&</sup>lt;sup>58</sup> *Ibid.* at page 25.

<sup>&</sup>lt;sup>59</sup> *Ibid.* at page 19.

<sup>&</sup>lt;sup>60</sup> *Ibid.* at page 25.



is unlikely that PCE will exceed the AWQS of 5.0  $\mu$ g/L at the wellhead for SRP Well 28E-0N [and] additionally due to the current position of the plume and PCE concentrations, it is unlikely that PCE would exceed 5.0  $\mu$ g/L at the wellhead for SRP Well 28.5E-1N." The SRP Comments were partially correct in that the South Mesa FS Report states that "[i]n the event PCE concentrations exceed SRP action levels at the wellheads, then wellhead treatment may be installed as a contingency." The contingency was "in the event PCE concentrations in water samples collected from the SRP wells exceed the risk-based PCE concentration of 33  $\mu$ g/L for irrigation use or 5.0  $\mu$ g/L if SRP changes the water use designation to drinking water" that a "wellhead treatment system [with GAC vessels] will be operated until PCE concentrations ... are below 33  $\mu$ g/L or 5.0  $\mu$ g/L for four consecutive sampling events."

Not surprisingly, SRP failed to inform ADEQ that, unlike the RID wells in the WVBA WQARF Site that have been designated for a municipal end use and that currently exceed the applicable EPA primary drinking water MCLs for that end use, the SRP's wells in the South Mesa WQARF Site were unlikely to exceed the applicable water quality standard even if operation of the SRP wells resumed and that it was SRP who designated the use for irrigation and applied its own risk-based standard for irrigation use.<sup>63</sup> Despite SRP's false characterization, the South Mesa selected remedy is intended to achieve both the applicable aquifer water quality standards in the aquifer and the applicable end use water quality standards based on the remedial objectives established for the site.<sup>64</sup>

Once again the Working Group's efforts to mischaracterize the facts and law and to limit the scope of the WQARF statutes, WQARF rules and ADEQ's remedial objectives for the WVBA WQARF Site are simply efforts to avoid and minimize their legal obligations to address and remediate the contamination impacting the WVBA aquifer and RID's water supply wells.

<sup>&</sup>lt;sup>61</sup> *Ibid.* at page 27.

<sup>&</sup>lt;sup>62</sup> *Ibid.* at page 32.

<sup>&</sup>lt;sup>63</sup> RID has not reviewed the SRP risk characterization that was used to assert risk-based discharge standards nor does RID ascribe to such application since other factors such as ADEQ's policy to prohibit relocation of VOCs from contaminated groundwater to air would need to be considered. It is telling and highly hypocritical that SRP has required all wells incorporated in remedial actions at other Phoenix-area CERCLA and WQARF sites, including SRP wells serving irrigation water, to be treated to drinking water standards since SRP chose this course of action at the South Mesa WQARF Site.

<sup>&</sup>lt;sup>64</sup> The South Mesa FS Report notes that if the uses are protected (both municipal use for City of Mesa wells and SRP's uses), "then groundwater monitoring will be continued until PCE concentrations in ALL groundwater monitor wells stabilize at a concentration less than the AWQS of 5.0  $\mu$ g/L" and the closure of the site can occur "[i]f PCE concentrations have been below the AWQS of 5.0  $\mu$ g/L in the samples collected from all wells for at least two consecutive sampling events." page 31 (emphasis added).



The Working Group does not intend to control, manage or cleanup the WVBA aquifer or to treat the extracted groundwater for its reasonably foreseeable end uses as a municipal water supply in violation of state law and ADEQ's goals

As discussed in RID's January 7, 2015 Response, the Working Group and its supporters do not intend to clean up the groundwater contamination present in the WVBA aquifer to the applicable aquifer water quality standards. Failure to clean up the target-VOC contaminants in the WVBA aquifer to the enforceable aquifer water quality standards violates state law.<sup>65</sup>

The Working Group also does not intend to control or manage the groundwater contaminant plume. Failure to control or manage the target-VOC contaminants in the WVBA aquifer so as not to assure protection of public health and the environment and allow the maximum beneficial use of the waters of the state as a future drinking water source violates state law.<sup>66</sup>

According to the WGFS Report, SRP and the Working Group hope, despite ADWR's recent letter and SRP's own certifications of RID's independent water rights, that RID will stop pumping RID's wells in the WVBA WQARF Site in 2026. If so, the new 500-gpm extraction well and treatment system proposed in the WGFS Report would cease operating at the end of 2025 well before the WVBA aquifer is cleaned up to the applicable aquifer water quality standards, thereby violating these enforceable standards.<sup>67</sup> Upon cessation of RID pumping in the WGFS Report, the Working Group provides no means to control, manage or cleanup the target-VOCs in the groundwater. As a result, the groundwater contaminant plume would no longer be contained or controlled<sup>68</sup> and would migrate to the west and northwest where the plume would contaminate additional groundwater resources and potentially impact additional wells adjacent to the WVBA WQARF Site. Moreover, if RID pumping in the WVBA were to cease, shallow groundwater contamination from the West Central Phoenix WQARF sites would migrate in the same northwesterly direction and potentially impact additional water provider wells adjacent to this area.

To any reasonable person, such an outcome, involving a total failure of a groundwater remedy that violates state standards and mandatory remedial action requirements, should be avoided, especially in the case of the COP and SRP who have declared that "[g]roundwater beneath the WVB Site is an important resource ... for long-term sustainable

<sup>66</sup> ARS § 49-282.06.A.1 and A.2.

<sup>65</sup> See ARS §§ 49-221.A, 9-223.A and E, 49-224.B, 49-262, 49-263, 49-282.06.A.1 and A.2.; see also footnote 41.

<sup>&</sup>lt;sup>67</sup> According to the WGFS, "[t]his is based on the assumption that the efficacy of the new extraction well primarily depends on operating alongside the current RID pumping regime". WGFS, page 49.

<sup>&</sup>lt;sup>68</sup> SRP noted that "RID's irrigation pumping has created a 'hydraulic trough,' which is containing the groundwater plume." SRP Comments, page 5.



water supplies."69 However, the COP and SRP are praising the WGFS Report and what is essentially a "do nothing" groundwater remedy. Why is that?

The simple answer may be due to competing water interests. However, such a view is not only contrary to law, but inexcusably short sighted given that the COP and SRP, by not cleaning up the largest groundwater contaminant plume in the state, are imposing this pollution and any exposure risks on the local community that is predominantly a low income minority population. Moreover, it is generally bad water management policy. If the COP and SRP approached this reasonably, they would realize that RID groundwater pumping in the WVBA is largely from the contaminated upper alluvial unit aquifer (UAU). which aside from the widespread industrial organic chemical contamination, contains elevated levels of total dissolved solids (TDS), nitrates, and other non-point source inorganic pollutants. The COP or SRP would have to expend significant money to reduce the levels of TDS and other inorganic solutes if they were to develop the UAU groundwater in this area for municipal use. Such water resource development makes little sense for the COP or SRP given the availability of substantial amounts of higher quality water resources, much of it renewable surface water supplies, that they possess and control in both the near and long term future.

From a more holistic point of view, it would seem more logical for the COP and SRP (which may convert irrigation wells to municipal use in the future) to encourage RID to continue pumping the overall poor quality groundwater in the UAU so as to preserve higher quality groundwater resources in the lower alluvial unit (LAU) for their future exploitation.<sup>70</sup> In fact, a proposed groundwater remedy such as that recommended in the RID FS Report would lock RID in to long-term utilization of what the COP and SRP would always view as substandard water quality, for as long as required to clean up the aguifer, and allow their unfettered development of groundwater supplies from the deep aquifer when needed. Conversely, without addressing the VOC contamination in RID wells, it would be logical for RID to merely drill replacement wells completed solely in the LAU for their development of potable water supplies, which would put RID in much more direct competition with the COP and SRP for future water supply development.

The Working Group and its supporters also do not intend to treat the extracted contaminated groundwater for its reasonably foreseeable end use as a municipal water supply as determined by ADEQ as a specific remedial objective for the WVBA WQARF Site. This was recently confirmed by the Arizona Chamber of Commerce who explained that the WGFS Report "conclusively demonstrates ... that treatment is NOT now needed and can be

<sup>&</sup>lt;sup>69</sup> SRP Comments, page 4.

To that end, the WGFS Report specifically identifies preferred remedial measures that will simply deepen threatened wells into the uncontaminated LAU of the WVBA aquifer. See Base Remedial Measures on page 31 of the WGFS Report.



avoided entirely."71 Even though Glenn Hamer's understanding of the WGFS Report is correct, failure to treat the contaminated groundwater would fail to achieve the remedial objectives established by ADEQ for the WVBA WQARF Site in violation of Arizona law.<sup>72</sup> If the Working Group and its supporters wanted to achieve all of the remedial objectives, including the municipal use remedial objective, established by ADEQ for the WVBA WQARF Site, why has the Working Group and its supporters falsely argued from the beginning that treatment is only necessary in the future "should contaminant levels in 2025 threaten beneficial uses"73 and that the final remedy for a WQARF site "need not always result in achievement of drinking water standards in the aquifer?"74 This is a position that RID strongly rejects as being contrary to applicable state law and the WOARF remedial action requirements, as has been described ad nauseam by RID, and to almost all other groundwater remedies implemented throughout Arizona. Such a position not only violates state law<sup>75</sup> and ADEQ's remedial objectives for the WVBA WQARF Site, but also ADEQ's stated goal to "ensure clean up of such pollution when it occurs". 76

### The WGFS Report has been proven to violate ARS § 49-282.06 based on the Working **Group's recent comments**

Consistent with the WGFS Report,<sup>77</sup> SRP recently clarified that "RID's irrigation pumping has created a 'hydraulic trough,' which is containing the groundwater plume." However, the Working Group also clarified that "Inlothing in the Working Group's proposed remedy depends on RID pumping."78 It is unclear how the proposed remedial alternatives in the WGFS Report can meet the requirement in ARS § 49-282.06.A.2 that the remedial action "provide for the control, management or cleanup of the hazardous substances" if the RID wells creating the hydraulic trough are not essential to the WGFS Report. Similarly, at the recent WVBA Community Advisory Board meeting on December 1, 2014, the Working Group's technical consultant told the public a different story by confirming that the WGFS Report did consider the amount of contaminants pumped from RID's wells for its removal and cost analyses calculations. If these calculations were revised to be consistent with the Working Group's latest twist, then the operational cost per pound of VOC mass removed

 $<sup>^{71}</sup>$  AZ Chamber Comments, page 2.  $^{72}$  AAC R18-16-407.E.1.

<sup>&</sup>lt;sup>73</sup> WG Response, page 11.

<sup>&</sup>lt;sup>74</sup> WG Response, page 13. As noted herein, the Working Group's support for such a claim is inconsistent with the plain terms of the applicable statute.

ARS §§ 282.06.B.4.b and 49-282.06.A.2.

<sup>&</sup>lt;sup>76</sup> ADEQ, WQARF 2014 Annual Report.

<sup>&</sup>lt;sup>77</sup> WGFS Report, page 19.

<sup>&</sup>lt;sup>78</sup> WG Response, page 16.



from the WGFS recommended remedy would be \$ 7,087/pound<sup>79</sup> compared to \$676/pound<sup>80</sup> for the RID FS recommended remedy.

# RID's efforts will prevent the Working Group and its supporters from shifting the financial responsibility to address the WVBA groundwater contamination to Arizona's taxpayers

Surprisingly, some of the comments suggest that RID's proposed remedial alternatives should be rejected because any approval of RID's FS Report will require "that the general taxpayers of Arizona will have to pay 50 percent or more of the costs to be incurred" to address the contamination.<sup>81</sup> What is surprising is that these comments acknowledge that RID has filed a federal cost recovery claim against a number of PRPs "at the WVB Site [who] are jointly liable for the entire cost of its scheme." These statements contradict each other. Yet again, the Working Group and its supporters are mischaracterizing both law and fact.

The truth is that RID has filed a federal action to recover incurred costs against the parties legally responsible for the releases of hazardous substances that have adversely impacted the WVBA aquifer and RID's water supply wells. RID believes that the polluters should pay and not have their financial responsibility shifted to the Arizona taxpayer. RID has committed to ADEQ that RID will voluntarily implement the selected remedial action pursuant to applicable state law.

However, it is unknown whether the Working Group has made any such promise.<sup>82</sup> In fact, it appears unlikely since the Working Group speaks of a WQARF allocation process. Although there is no requirement that ADEQ perform a cost allocation process under WQARF,<sup>83</sup> an ADEQ-led allocation process would only address costs incurred by ADEQ (not RID) and would require that the Arizona taxpayer assume nearly all of the financial responsibility for the selected remedial action costs. The claim that the Arizona taxpayer "will have to pay 50 percent or more of the costs" is the percentage that the Working Group

<sup>&</sup>lt;sup>79</sup> Based on the Working Group's projection that extraction and treatment at well EW-2 pumping at 500 gallons per minute would remove approximately 74 pounds of VOCs per year. The annual O&M cost of \$524,445 is derived from Module E Cost Detail in Appendix E of the WGFS Report.

<sup>&</sup>lt;sup>80</sup> Based on RID's projection that groundwater extraction and treatment associated with installed wellhead treatment systems at the six most contaminated RID wells sites (the RID proposed groundwater remedy) would remove approximately 2,500 pounds of VOCs per year. The annual O&M cost is derived from Table 7 of the RID Draft FS Report. The annual O&M cost of \$1,690,050 excludes an estimated \$134,000 annual cost for groundwater monitoring and an estimated \$225,000 annual assessment for major equipment repair or replacement.

<sup>81</sup> AZ Chamber Comments, pages 1 and 2; SRP Comments, page 6; COP Comments, page 1.

<sup>&</sup>lt;sup>82</sup> The Working Group clearly stated that "WQARF will bear the costs of any required future contingent remedies" identified in the WGFS Report which suggests that ADEQ and the Arizona taxpayer will be responsible for the implementation of the selected remedy for the WVBA WQARF Site. WG Response, page 17. Similarly, SRP noted that "while RID believes such costs will be paid by [PRPs], the reality is that only a portion of those costs could be paid by PRPs ... [and] [t]he State is required to pick up orphan shares, plus a 25% discount for those who settle early." SRP Comments, page 6.

<sup>83</sup> See ARS § 49-287.05; see also 8 AAR 1504.



has conveniently determined to be the share of businesses that no longer exist (known as orphan shares). Pursuant to WQARF, ADEQ and the Arizona taxpayers are financially responsible for the orphan shares. However, the Arizona taxpayers actually will have to pay more pursuant to other WQARF provisions that limit the liability of viable PRPs. Not only does WQARF provide settling PRPs with a guaranteed 25% reduction of liability, which will be subsidized by Arizona's taxpayers, but WQARF also allows PRPs to expend costs outside the selected remedial action that will be considered a credit toward their liability. Such costs include efforts to identify other PRPs<sup>84</sup> and efforts to address the contamination, including the development of a FS Report. Any credits provided to the Working Group and other PRPs simply will increase the Arizona taxpavers' financial burden.85

It is unlikely that ADEQ would pursue a WQARF allocation process at the WVBA WQARF Site given that ADEQ's Director has acknowledged that "[b]ased on the current liability scheme and funding challenges, it is becoming clear that the WQARF program is not sustainable."86 Fortunately for Arizona's taxpayers, RID has offered to voluntarily implement the selected remedy pursuant to state law and has filed a federal cost recovery action against PRPs that will ensure that the polluters, and not the Arizona taxpayers, pay to address the contamination.87

#### Contaminated groundwater exceeding applicable environmental standards must be addressed regardless of whether there is a currently quantifiable public health threat

Various comments mischaracterize the law to suggest that remediation of contaminated groundwater can only be approved if there is a currently quantifiable public health risk.<sup>88</sup> Not only are such suggestions contrary to applicable state laws and state and federal policies described above and in RID's earlier January 7, 2015 Response, but they are inconsistent with nearly every existing groundwater cleanup in Arizona.

<sup>&</sup>lt;sup>84</sup> The Working Group has identified more than 3800 parties for ADEQ to investigate to determine the orphan share of liability that will be borne by Arizona's taxpayers. If ADEQ refuses to investigate these parties, the PRPs can perform their own investigations and any incurred costs are credited against their liability, which will be shifted to the Arizona taxpayers.

<sup>&</sup>lt;sup>85</sup> Based on the amount of money spent by the Working Group and other PRPs over the past five years and the more than 3,800 potential parties identified by the Working Group, it would not be surprising if the Arizona taxpayers share exceeded 80%.

<sup>&</sup>lt;sup>86</sup> ADEQ, WQARF 2014 Annual Report, page 4. This statement by the ADEQ Director appears to contradict the alleged success of the WQARF program proclaimed by the Working Group. WG Response, page 5. In fact, prior to this recent administration, not a single WQARF Site had been delisted.

<sup>&</sup>lt;sup>87</sup> ADEO has incurred significant costs at the WVBA WOARF Site and those costs, including reimbursement to RID pursuant to ARS § 49-282.E.11, could be recovered from PRPs as part of any settlement.

<sup>&</sup>lt;sup>88</sup> For example, the AZ Chamber Comments state that "[t]here is no health risk or related reason to treat the water."



As discussed more thoroughly in RID's January 7, 2015 Response, the Working Group and its supporters falsely claim that a currently quantifiable threat to public health must exist before contaminated groundwater can be remediated. This claim flies in the face with the fact that contaminated groundwater used for irrigation is treated to drinking water standards at other WQARF sites in Arizona even though there is no significant risk to public health at those sites. In fact, in the greater Phoenix area, groundwater is being pumped, treated to drinking water standards and discharged for irrigation use at the following WQARF and CERCLA sites:

- Phoenix Goodyear Airport (PGA) CERCLA Site in Goodyear
- North Indian Bend Wash (NIBW) CERCLA Site in Scottsdale
- Motorola 52<sup>nd</sup> Street (M52) CERCLA Site (OU-2) in Phoenix
- 56th Street and Earll Drive WQARF Site in Phoenix
- West Osborn Complex (WOC) WQARF Site in Phoenix
- Central and Camelback WQARF Site in Phoenix

SRP (who is a Working Group member) uses groundwater in all of these sites except PGA for irrigation use. <sup>89</sup> At all of the aforementioned groundwater contamination sites, the groundwater being used by SRP for irrigation is arguably suitable for that use without treatment. However, in <u>all</u> cases the contaminated groundwater that is pumped and delivered for irrigation use is first treated to remove VOCs to concentrations that are safely below drinking water standards. It is the height of hypocrisy for SRP to suggest in their comments that RID wells currently used for irrigation do not require treatment, when SRP has an established policy that requires the PRPs at the WQARF and CERCLA sites listed above to treat all discharges of contaminated groundwater to drinking water standards prior to delivery for irrigation use in the SRP canals.

RID receives groundwater for irrigation use at the PGA Site. RID requires the PRPs at the PGA Site to treat all discharges of contaminated groundwater to drinking water standards prior to delivery to the RID canal. Similar to SRP's policy, RID's policy requires that "any RID wells located within any Federal or State Superfund Site and that are contaminated by hazardous substances ... must be remediated pursuant to an appropriate and timely groundwater remedial action to mitigate the actual and/or potential harm to public health, welfare, and the environment." RID's policy also requires that "any discharges of remediated groundwater into the RID water distribution system must be of a quality that meets the [EPA MCLs] and the [AWQSs] for the associated contaminants of concern." 1

<sup>&</sup>lt;sup>89</sup> In fact, in some areas, SRP has retained authority to refuse accepting remediated water for irrigation use "if the quality of the discharge does not meet applicable standards [drinking water standards]." Letter to EPA and ADEQ from SRP and Motorola regarding Agreement to Discharge Treated Groundwater into the Grand Canal, March 1, 1999.

<sup>&</sup>lt;sup>90</sup> RID Board of Directors. Statement of Policy Regarding Superfund Sites, November 9, 2010.

<sup>&</sup>lt;sup>91</sup> *Ibid*.



The 56<sup>th</sup> and Earll Drive and Central and Camelback WQARF Sites received a lower health risk score than the WVBA WQARF Site, 92 and yet the contaminated groundwater is treated with granular activated carbon to drinking water standards before being discharged to SRP for irrigation use. In fact, the Working Group also proposes that the contaminated groundwater in the WVBA aquifer pumped by its single new well must be treated to drinking water standards prior to discharge for irrigation use even though there are no current acute health risks.<sup>93</sup> These facts contradict the Working Group's argument that a "pump-and-treat remedy is unnecessary today because the untreated water is suitable for its current irrigation use without health risks."

# The ADHS Heath Consultation Report did not provide any new information and did not dispute that environmental standards are still applicable despite no current public health risk

The Working Group and its supporters reference a recent Health Consultation Report issued by the Arizona Department of Health Services (ADHS) that they tout as evidence that there is no adverse health risk associated with use of water from RID wells and canals. This report examined the potential health risks associated with one specific well (RID-84) as if it were used as potable water. With the available information, ADHS concluded that exposure to VOCs in the water supply (which contains PCE at 8.1  $\mu$ g/L compared to its MCL of 5.0  $\mu$ g/L) would not be expected to harm people's health under typical conditions of household water use. Of course, the more relevant issue that was overlooked in this scenario is that the PCE concentration at RID-84 exceeds the MCL for PCE and the water in this hypothetical scenario is unfit for direct drinking water use without treatment. In fact, serving this contaminated water for potable purposes, as considered in this ADHS evaluation, would be a violation of state and federal law. 95

<sup>92</sup> http://www.azdeq.gov/environ/waste/sps/download/WQARF\_Registry\_Listing\_2014\_1.pdf

<sup>&</sup>lt;sup>93</sup> Similarly, the COP's Acting Environmental Programs Manager noted that the "City supports a remedy ... implementing a targeted *extraction and treatment* approach of contaminant hot spots." COP Comments, Attachment 2, page 1.

<sup>2,</sup> page 1.

94 WG Response, page 11. Similarly, SRP Comments falsely note that "there is no reason to treat water ... to drinking standards when it is not clear when, if ever, that water will be used for drinking water purposes. There is no risk in continuing the use of the groundwater pumped from the WVB area for irrigation purposes." SRP Comments, page 2. Not only is this argument contrary to the Working Group's own proposed remedial alternatives, to which SRP is a Working Group member, but it has been argued for nearly five years by the Working Group and has not stopped ADEQ from approving pump-and-treat remedial actions to address the groundwater contamination within the WVBA WQARF Site because it violates applicable WQARF remedial action requirements. Similarly, this argument has not prevented SRP from mandating that other groundwater contaminant cleanup sites treat extracted groundwater to drinking water standards prior to discharge for an irrigation end use where there has been even less of a current risk to public health.

<sup>95</sup> See AAC R18-4-109; Federal Safe Drinking Water Act, 42 U.S.C § 3009.



The second stated purpose of the Health Consultation Report was to evaluate VOC concentrations in other RID wells and canal water to determine if there is a health concern for people that come in contact with irrigation water. This report provides little useful information and simply clarifies, once again, that there is no current risk to public health from incidental ingestion of small amounts of contaminated water that may occur while gardening and through recreational play. The Health Consultation Report did not evaluate the more pertinent issue of the public health risk associated with the potable use of groundwater from impacted RID wells and, as such, accomplishes very little towards informing the public about the health risks associated with the reasonably foreseeable use of contaminated groundwater as a drinking water resource.

It is surprising, or maybe not given that the report was issued at the request of PRPs, that this Health Consultation Report does not include certain language that has been included by ADHS in other relevant health consultation reports. In a similar recent health consultation report, ADHS noted that "[a]t the present time, the chemicals detected in the monitoring wells ... are not expected to cause public health concern" and that "[t]here would be no public health concern if these wells were to be used as residential wells, because no cancerous or non-cancerous adverse health effects would be expected under the assumed exposure scenarios."96 This ADHS report goes on to say, however, that "[i]n Arizona, all aquifers are identified as drinking water source aquifers unless specifically exempt (ARS§49-224). The Arizona Aquifer Water Quality Standards (AAWQSs) are enforceable standards developed to protect groundwater sources for drinking water use (AAC§R18-11-406) and protective of human health." Although not included in the Health Consultation Report for RID's wells, ADHS correctly recognizes that there are enforceable aguifer water quality standards that must be achieved even if there is no currently quantifiable public health risk. However, the recent ADHS Health Consultation Report fails to address these independently enforceable aquifer water quality standards and other applicable and enforceable WQARF remedial action requirements discussed above and in RID's January 7, 2015 Response.<sup>97</sup>

Similarly, the recent ADHS Health Consultation Report only discussed current risks and did not contradict ADEQ's recent determination that measures should be taken to limit the transfer of contaminants from groundwater into the air. In fact, the COP supports a remedy that will "capture and treat the contaminants ... preventing exposure to the public and the environment."98 Likewise, SRP previously indicated, "[allthough not required to meet water quality standards associated with RID's current irrigation use, some or all of the groundwater

<sup>&</sup>lt;sup>96</sup> ADHS, Health Consultation: Kinder Morgan Yuma Booster Station, An Update for Water Sampling Results, page 2 (2013).

97 See WVBA WQARF Site remedial objectives, ARS § 49-282.06.A.2 and ARS § 49-282.06.B.4.b.

<sup>98</sup> COP Comments, Attachment 2, page 1. It is unclear why the Environmental Programs Manager for the COP supports a remedial strategy that prevents exposure to the public, but the COP attorney concurs that treatment is not necessary if no health risk exists. See COP Comments, page 1 (joining comments by Working Group); see also discussion above about Working Group's contrary positions about the necessity of treatment.



could be treated to reduce the transfer of VOCs from the current plume to the air".99 Not only have such measures already been required at the WVBA WQARF Site, but ADEQ has required similar measures at other WQARF sites. At the West Osborn Complex WQARF Site, ADEQ required treatment that would provide a high degree of public protection against potential exposure to VOCs in air.100 Likewise, ADEQ required a PRP at the 56th Street and Earll Drive WQARF Site to implement measures to limit the transfer of contaminants. It appears that ADEQ is applying this policy against the transfer of contaminants at WQARF sites and regardless of whether "an unacceptable risk level" is created by the transfer.101 In fact, ADEQ's prior actions at other communities contradict the false arguments raised by the Working Group as to why the minority population in West Phoenix should not be afforded the same level of environmental and public health protection.102

## RID's is not requesting that RID's ADEQ-Approved ERA be approved as the final remedy for the WVBA WQARF Site

Once again, the arguments made by the Working Group and its supporters are inconsistent with the facts. A simple review of RID's proposed remedial alternatives in RID's FS Report clearly demonstrate that RID's ADEQ-approved ERA is not one them. In fact, neither is RID's ADEQ-approved Modified ERA. Statements regarding RID's ERA are irrelevant to the FS process other than to demonstrate that ADEQ has already determined that a remedial action that costs more and addresses more wells was "reasonable, necessary and cost-effective." Fortunately, RID's ADEQ-approved Modified ERA was more cost-effective while still meeting the applicable legal requirements for a WQARF remedial action than the RID ADEQ-approved ERA. The less aggressive remedial alternative in RID's FS Report is even more cost-effective and still meets all of the applicable legal requirements for a remedial action and achieves all of the "remedial objectives" for the WVBA WQARF Site.

<sup>&</sup>lt;sup>99</sup> SRP letter re: Roosevelt Irrigation District's Proposed Early Response Plan, West Van Buren WQARF Site, December 4, 2009.

<sup>&</sup>lt;sup>100</sup> Final Feasibility Study Report for the Shallow Groundwater System, West Osborn Complex WQARF Site, Phoenix, Arizona, prepared by GeoTrans, Inc. January 27, 2012, page 46.

ADEQ has confirmed this policy in response to the legal position taken by Maricopa County Air Quality Department which "clearly articulated" that "ADEQ does not support the relocation of contaminants from one media (groundwater) to another (air). Contaminants should be removed from the environment and treated or disposed of appropriately." See ADEQ letter re: Arizona Department of Environmental Quality's Position on the Removal of Air Emission Controls from the North Indian Bend Wash Site, November 14, 2007. Based on this letter, EPA cited that "state and local requirements" were critical components of the decision requiring air treatment at the North Indian Bend Wash CERCLA Site in Scottsdale, despite their not being a significant health risk. See EPA letter re: EPA Decision on Air Emission Controls at Groundwater Treatment Facilities, Indian Bend Wash Superfund Site, November 14, 2007.

<sup>&</sup>lt;sup>102</sup> WG Response, pages 9-10.



## RID's FS Report was submitted for ADEO approval under Section 413 in compliance with the WOARF requirements

Contrary to the unsubstantiated WG Response that RID's "submittal states that RID conducted its FS in compliance with CERCLA requirements, not WQARF requirements, and designed its proposed remedy in accordance with CERCLA, not WQARF,"103 RID has consistently and specifically submitted its proposed remedial actions, including the RID FS Report, to address the groundwater contamination impacting and threatening to impact its water supply wells in the WVBA WQARF Site pursuant to state, and not federal, law. In fact, ADEO has clearly stated in its two prior approvals for RID remedial actions within the WVBA WQARF Site that "ADEQ has not reviewed whether the ... [RID] Work Plan is consistent with any federal laws or regulations."104

In fact, RID's FS Report clearly states that "RID is submitting this Draft FS Report pursuant to (1) Arizona Revised Statutes (ARS) §§ 49-285.05 and 49-287.03, which stipulate that anyone may ... perform all or a portion of a FS at a WQARF registry site, provided that work will be conducted in accordance with remedial criteria and rules adopted pursuant to ARS § 49-282.06, and (2) that certain Agreement to Conduct Work, dated October 8, 2009,"105 which was, "pursuant to A.R.S. § 49-282.05, made and entered into ... by and between the Arizona Department of Environmental Quality ... and the Roosevelt Irrigation District."106

Contrary to the WG Response, RID has never "argue[d] that CERCLA requirements must be substituted for WQARF requirements."107 RID has demonstrated that the RID FS Report is consistent with RID's past ADEQ-approved remedial actions to begin addressing the groundwater contamination in the WVBA WQARF Site and with other similar groundwater remediation sites in Arizona that have been determined by ADEQ to be in "compliance with applicable State statutes and rules." Although the CERCLA requirements are not to be substituted for the WQARF requirements, state law mandates that ADEQ consider federal requirements and guidelines in selecting a WQARF remedial action.

<sup>&</sup>lt;sup>103</sup> WG Response, page 1 regarding relevance of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requirements.

<sup>&</sup>lt;sup>104</sup> ADEQ, Approval of RID's Early Response Action, dated June 24, 2010; ADEQ, Approval of RID's Modified Early Response Action, dated February 1, 2013.

<sup>&</sup>lt;sup>105</sup> RID FS Report, cover letter page 1 (July 11, 2014).

<sup>&</sup>lt;sup>106</sup> Agreement to Conduct Work, dated October 8, 2009.

<sup>&</sup>lt;sup>107</sup> WG Response, pages 2 and 6. Unlike the Working Group, ADEQ was present at a meeting where EPA discussed the creation of an Operable Unit (OU) 4 of the federal Superfund Site that would cover parts of the WVBA WQARF Site. Once again, the Working Group mischaracterizes facts. The Working Group would have ADEQ and the general public believe that the "overfiling" of the East Washington WQARF Site only involved OU3 and occurred after 1997. WG Response, pages 20-21. However, ADEQ's website clarifies that part of the East Washington WQARF Site became OU2 in 1990-1992. In addition to the false information regarding the East Washington WQARF Site, the Working Group provides irrelevant comments about the EPA process "to list a site on the NPL," as support why an OU4 could not occur within the WVBA WQARF Site, even though the Motorola 52<sup>nd</sup> Street Site has already been listed and would not have to undergo such a process. *Ibid*.



### ADEQ's Director is mandated by Arizona statute to consider CERCLA requirements

If there had not been years of the Working Group blatantly misrepresenting both the law and the facts regarding the WQARF and CERCLA programs, generally, and the WVBA WQARF Site, specifically, it would be shocking that the WG Response stated that "CERCLA requirements or guidance documents ... are not relevant to any evaluation of remedial actions at WQARF sites." In direct contradiction of the WG Response, Arizona law mandates that "in selecting remedial actions the director shall consider the following factors: ... [t]he availability of other appropriate federal or state remedial action." In fact, there are other provisions in Arizona's statutes that mandate the ADEQ Director to consider "CERCLA requirements or guidance documents." As ADEQ adopts "water quality standards for ... all waters in all aquifers to preserve and protect the quality of those waters for all present and reasonably foreseeable future uses," the "director shall consider, but not be limited to, the following: ... [g]uidelines, action levels or numerical criteria adopted or recommended by the United States environmental protection agency or any other federal agency." 111

Interestingly, but incorrectly, the Working Group characterizes the existing statutory obligation that ADEQ "shall consider ... appropriate federal or state remedial action ... in selecting remedial actions" as a "new remedy criteria." It appears the Working Group is incorrectly arguing that the legislative intent included in ADEQ's preamble of the WQARF rules supplants the express language in Arizona's statutes. However, the preamble often cited in the WG Response clearly states that "[t]hese rules do not revisit issues that were adequately addressed in statute," that "these rules, even more than most, must be read in close conjunction with the underlying statutes," and that the "rulemaking fits into the broader context of the WQARF statutory framework." 116

<sup>&</sup>lt;sup>108</sup> WG Response, page 2. It is telling and contrary to this Working Group's statement that the "New WQARF" program was developed after "tens of thousands of hours examining various aspects of Arizona's cleanup programs as well as similar programs in other states *and at the federal level.*" 8 Ariz. Admin. Register (AAR) 1491, 1493 (March 29, 2002). In fact, the WG Response clearly establishes that the Arizona Legislature recognized that "components of CERCLA rules and guidance might be useful for the WQARF rules." WG Response, page 3.

<sup>&</sup>lt;sup>109</sup> ARS § 49-282.06.C.7. State law mandates such consideration and does not simply provide authority to consider the federal actions as falsely argued by the Working Group. WG Response, page 2.

<sup>&</sup>lt;sup>110</sup> WG Response, page 2.

<sup>&</sup>lt;sup>111</sup> ARS § 49-221.A and C.5.

<sup>&</sup>lt;sup>112</sup> WG Response, page 3. However, the Working Group has no problem hypocritically asking ADEQ to consider EPA guidance on "green remediation" that recognizes a desire to "minimize water use." WG Response, page 7. Yet again, it appears that the Working Group is only willing to consider EPA guidance that is contrary to applicable existing Arizona law. Pursuant to ARS § 49-282.06.B.4.b, the "specific measures to address any such well shall not reduce the supply of water available to the owner of the well."

<sup>&</sup>lt;sup>113</sup> WG Response, pages 2-3.

<sup>&</sup>lt;sup>114</sup> 8 AAR 1494.

<sup>&</sup>lt;sup>115</sup> *Ibid*.

<sup>&</sup>lt;sup>116</sup> *Ibid*.



Although the Working Group agrees that the "evaluation and selection of remedial actions at WQARF sites is governed by Arizona statutes and rules," 117 the Working Group and its supporters falsely argue that they get to unilaterally and inconsistently determine which of those Arizona statutes and rules apply to the WVBA WQARF Site, despite the plain language of the Arizona statutes and ADEQ's actions at other WQARF sites.

## Basic requirements of WQARF were modeled after CERCLA and were not rejected by the "New WQARF" program

The comparison charts submitted to ADEQ by RID clearly demonstrate that WQARF and CERCLA are intended to achieve similar requirements and that only the RID FS Report meets the WQARF or CERCLA requirements. Remedial actions under WQARF and CERCLA are required to (i) protect public health and the environment, (ii) be consistent with applicable laws, including public participation (iii) control the mobility, manage the toxicity and cleanup the volume of hazardous substances, (iv) be cost-effective, and (v) utilize feasible technologies that will return usable ground water to its beneficial uses. 118

The WG Response does not contradict these basic requirements since these basic requirements are still required by Arizona statute. Instead, the Working Group falsely claims that if the procedures to achieve these similar goals are in any way different, then there can be no connection between the two programs. In fact and in contradiction of the Working Group's position, the 2002 rulemaking preamble states that the major provisions of the "New WQARF" were limited to proportionate liability, Iop program funding, site prioritization, cleanup methods and goals, Iommunity involvement and encouraged settlements. Substantively, CERCLA and WQARF "cleanup standards" are inextricably related to each other as CERCLA defines the "degree of cleanup" as what "is legally applicable [under federal or state law] ... or is relevant and appropriate under the circumstances of the release or threatened release of such hazardous substances."

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<sup>&</sup>lt;sup>117</sup> WG Response, page 2.

<sup>&</sup>lt;sup>118</sup> ARS § 49-282.06.A and 40 C.F.R. § 300.430.

<sup>&</sup>lt;sup>119</sup> The existing statutory obligations that ADEQ must consider CERCLA actions, requirements and guidance during the WQARF process clearly acknowledges that Arizona law recognizes some value in the CERCLA program requirements even if it "precluded the possibility of their incorporation by reference." 8 AAR 1511.

<sup>&</sup>lt;sup>120</sup> Liability is not an issue relevant in the selection of a remedial action.

The cleanup goals remained to restore groundwater aquifers to their protected beneficial use classification and to treat contaminated groundwater "to allow the maximum beneficial use of the waters of the state" including, "at a minimum, … the current and reasonably foreseeable end uses" of that groundwater as determined by ADEQ as WQARF remedial objectives in accordance with applicable Arizona laws and WQARF rules; however, there would be contingencies provided in case those uses could not be practicably achieved. *See* ARS §§ 49-224.B, 49-282.06.A.2, 49-282.06.B.4.b, 49-282.06.D and 49-282.06.E.

<sup>&</sup>lt;sup>122</sup> The "New WQARF" provided additional community involvement at all stages of the cleanup process.

<sup>&</sup>lt;sup>123</sup> 8 AAR 1493-1494 (2002); See ADEQ, WQARF FY2014 Annual Report, page 5 (2014).

<sup>&</sup>lt;sup>124</sup> See 42 U.S.C. §9621.d; CERCLA § 121.d.



fact that liability and procedural reforms were made to the WQARF Program in 1997 does not alter the fact that the purpose and basic requirements of the WQARF Program, as a whole, were modeled after CERCLA. 125 It is telling that the WQARF Program was simply "reformed" rather than discarded completely as the Working Group and its supporters would like ADEQ and the general public to falsely believe.

RID appreciates ADEQ consideration of the comments provided in this letter. Please give me a call with any questions or comments.

Best Regards,

SYNERGY Environmental, LLC

Dennis H. Shirley, PG

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<sup>125</sup> It is telling that the Working Group on page 4 of its response has to cite to comments and arguments raised during the WQARF reform debate about Maximum Contaminant Levels (MCLs) being adopted as goals within the aquifer for groundwater sites, even though existing Arizona law, even under "New WQARF," has adopted the primary MCLs as the applicable aquifer water quality standard for all aquifers, as all Arizona aquifers are classified for drinking water protected use. ARS § 49-224.B. Even the Arizona Department of Health Services has noted in a recent health consultation report that "[i]n Arizona, all aquifers are identified as drinking water source aquifers unless specifically exempt (ARS§49-224). The Arizona Aquifer Water Quality Standards (AAWQSs) are enforceable standards developed to protect groundwater sources for drinking water use (AAC§R18-11-406) and protective of human health." ADHS, Health Consultation: KINDER MORGAN YUMA BOOSTER STATION, An Update for Water Sampling Results, page 2 (2013).